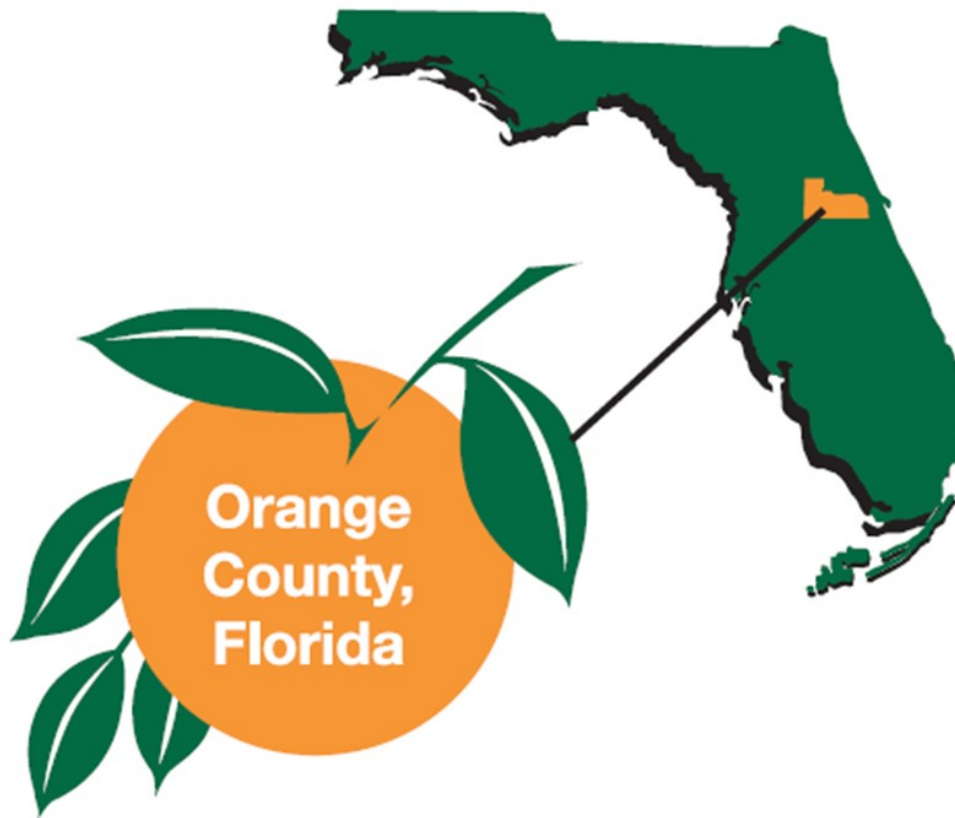


ANNUAL INVESTMENT REPORT

FOR THE YEAR ENDED
SEPTEMBER 30, 2022



PHIL DIAMOND, CPA
COUNTY COMPTROLLER



ANNUAL INVESTMENT REPORT

FOR THE YEAR ENDED
SEPTEMBER 30, 2022

PHIL DIAMOND, CPA
ORANGE COUNTY COMPTROLLER

EXECUTIVE SUMMARY

The portfolio earned \$22.5 million for an effective rate of return of 0.78% on an average daily balance of \$2.87 billion in Fiscal Year 2022. For comparison, the portfolio earned \$15.8 million for an effective rate of return of 0.64% on an average daily balance of \$2.45 billion in Fiscal Year 2021. Investments were made in compliance with the Investment Policy’s permitted investment types, composition limits and allowable maturities.

The investment portfolio is affected by domestic monetary policy and national economic activity. The Federal Reserve increased the fed funds target range at five consecutive meetings beginning in March, which raised the overnight rate from 0.00%-0.25% to 3.00%-3.25% by the end of the fiscal year. The Fed raised rates as inflation increased at the fastest pace since the early 1980s and unemployment hovered around 50-year lows. The higher rates had the greatest impact on yields in overnight investments such as Florida PRIME and money market mutual funds, as well as short-term agency discount notes.

Interest earnings were driven higher by the County’s short-term investments. Earnings in the current operating sub-portfolio, which has a maximum maturity of 13 months, more than quadrupled to \$13.8 million. The dramatic increase in earnings was attributable to the Federal Reserve’s most aggressive rate hikes since it began using the overnight rate as its primary monetary policy tool in 1990. However, interest earnings declined in the longer-term intermediate term sub-portfolio (3-year ladder) and noncurrent operating sub-portfolio (5-year ladder). During the pandemic, these longer-term portfolios accounted for the majority of earnings when short-term interest rates were near zero.

Section 218.415 (15), Florida Statutes, requires the Orange County Comptroller to provide an annual report to the Board of County Commissioners of the securities in the portfolio by investment type, book value, market value and income earned. This information is presented below as of September 30, 2022.

Summary Table of Portfolio Performance

<u>Investment Type</u>	Book Value September 30, 2022	Market Value September 30, 2022	Earnings Fiscal Year 2022
U.S. Treasuries	\$1,928,019,548	\$1,868,233,620	\$14,906,613
Florida PRIME (SBA)	582,675,194	582,675,194	4,875,578
Federal Instrumentalities	293,992,507	292,928,500	1,314,375
Fixed Income Money Market Mutual Funds	145,070,966	145,070,966	1,332,627
Certificates of Deposit	-	-	44,431
Bank Money Market Deposit	-	-	24,505
Totals	\$2,949,758,215	\$2,888,908,280	\$22,498,129

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ANNUAL INVESTMENT REPORT
for the year ended September 30, 2022
ORANGE COUNTY, FLORIDA

I. INVESTMENT POLICY

Section 218.415, Florida Statutes provides units of local government with the ability to conduct investment activity outside the framework of that Statute that is consistent with a written plan adopted by the local governing body. Orange County's (County) investment activity is authorized by the Investment Policy (Policy) adopted by the Board of County Commissioners (BCC). The Policy applies to all investment activities and financial assets of the BCC excluding funds invested in the Orange County Retiree Health Care Benefit Trust, which was created solely to provide funding and payment of post-retirement benefits to beneficiaries.

The County's investment activity was conducted in accordance with written procedures and internal controls.

II. INVESTMENT ADVISORY COMMITTEE

The Committee was established by the Comptroller to recommend investment strategies and monitor the performance and structure of the County's portfolio. The Committee is chaired by the Chief Deputy Comptroller and the other members are community volunteers with financial expertise. During the fiscal year, the community volunteers were Daniel Johnson, Kimberly Sterling, Jacinta Mathis and Jim Downing. Mr. Johnson is a Shareholder at Carlton Fields Jordan Burt, P.A.; Ms. Sterling is Vice President and Wealth Advisor at Resource Consulting Group; Ms. Mathis is a Business, Real Estate and Wealth Management Attorney at Mathis Law Group; and Mr. Downing is a Group Chairman of a Vistage CEO Peer Group.

III. INVESTMENT OBJECTIVES

The Policy describes three specific objectives to be applied in managing the County's investments. The primary investment objective is **safety** of the County's funds. The portfolio is managed in a manner that seeks to ensure the preservation of capital in the overall portfolio. To achieve this objective, investments are diversified across a variety of securities offering independent returns and maturities. On average in Fiscal Year 2022, approximately 76% of portfolio assets were invested in Treasuries and money market mutual funds comprised of Treasuries and Treasury-backed repurchase agreements. Treasuries are considered to have the lowest default risk of any security type because they are guaranteed by the full faith and credit of the United States Government.

The second investment objective is to maintain sufficient **liquidity**. The County's funds are invested to match maturities with forecasted expenditures for operating, payroll and capital needs. Liquidity also encompasses the ability to sell an investment when necessary, with minimal delay and minimal loss of principal.

Maximizing yield on the portfolio is the County’s third investment objective. This objective is only sought after the first two investment objectives are met.

IV. PORTFOLIO PERFORMANCE

Acceptable portfolio performance is the result of balancing the rewards of investing, or the income earned, with the risks associated with those investments. Factors influencing the portfolio’s performance include the types of investments permitted, allowable maturities, liquidity requirements, domestic monetary policy, sensitivity of asset values to changes in market conditions, local economic activity (the dollars available to be invested) and the investment operation.

The portfolio earned \$22.5 million for an effective rate of return of 0.78% on an average daily balance of \$2.87 billion in Fiscal Year 2022. For comparison, the portfolio earned \$15.8 million for an effective rate of return of 0.64% on an average daily balance of \$2.45 billion in Fiscal Year 2021.

This report discusses in detail each of the factors influencing portfolio performance, as well as the County’s depository banking relationship and debt refinancing activities.

V. PERMITTED INVESTMENTS AND ALLOWABLE MATURITIES

Table 1 summarizes the permitted investments, composition limits and maximum allowable maturities. The County’s excess funds are invested according to Orange County Code Section 17-5, which authorizes the Comptroller to invest in specific permitted investment types. The permitted investments are restricted by the Policy’s composition limits and maximum allowable maturities. The Policy also restricts the investment maturities of current operating funds to not more than 13 months, the investment maturities of noncurrent operating funds to not more than 60 months, and the investments of bond reserves, construction funds and other non-operating funds to a term appropriate to the need for the funds. Following is a brief description of each investment type. It is generally regarded that the following investment types are safe investments and meet the Policy’s first objective: safety.

Table 1 – Permitted Investments

<u>Investment Type</u>	<u>Composition Limit</u>	<u>Maximum Maturity</u>
Florida PRIME (SBA)	40%	NA
Treasuries	100%	10 Years
Instrumentalities	45%	10 Years
CDs & Savings Accounts	30%	One Year
Repurchase Agreements	20%	30 Days
Bankers’ Acceptances	15%	270 Days
Commercial Paper	15%	270 Days
Municipal Obligations	10%	Three Years
Money Markets	25%	NA

A. Florida Local Government Surplus Funds Trust Fund (Florida PRIME)

Florida PRIME is administered by the Florida State Board of Administration (SBA) for the purpose of pooling investment funds of local governments in an investment portfolio of money market instruments that provide liquidity while preserving capital. As of October 1, 1997, the SBA had converted Florida PRIME to a “2a-7 like” investment pool (SEC Rule 2a-7 of the Investment Company Act of 1940). On February 13, 2008, the Trustees of the SBA hired Federated Investors to manage Florida PRIME, effective on March 1, 2008. The SBA takes reasonable care to maintain a weighted average maturity of 60 days or less and to have no more than 25% of assets in a single industry sector, except the financial services industry. In addition, the SBA will generally comply with the diversification limitation of having at least 50% of the portfolio invested in securities rated A-1+ or those deemed to be of comparable credit quality. On September 30, 2022, Florida PRIME was invested in fixed rate and floating rate bank instruments, fixed and floating rate corporate commercial paper, fixed and floating rate asset backed commercial paper, money market mutual funds, floating rate corporate notes, U.S. Treasury securities and repurchase agreements. A maximum of 40% of the portfolio may be invested in Florida PRIME but when combined with money market mutual funds, may not exceed 50% of the portfolio.

B. U.S. Treasury Securities (Treasuries)

The securities comprising Treasuries are direct obligations of the U.S. Government. The securities are designated by maturity. Treasury bills have maturities of one year or less, Treasury notes have maturities of two to 10 years, and Treasury bonds have maturities of more than 10 years. The prices of the longer maturities are more volatile because they are more sensitive to interest rate fluctuations. Treasury yields are typically lower than yields on debt issued by federal agencies sponsored by the U.S. Government.

C. Federal Agency Securities (Instrumentalities)

Instrumentalities are securities issued by federal agencies sponsored by the U.S. Government. The Policy allows purchases of bonds, notes or debentures of the issuing agencies including Federal Farm Credit Banks, Federal Home Loan Bank or its district banks, Federal National Mortgage Association (Fannie Mae) and Federal Home Loan Mortgage Corporation (Freddie Mac). Instrumentalities vary in maturities. Yields on Instrumentalities are typically greater than yields of similar Treasuries. The Policy further restricts investments in any one agency to 15% of the portfolio.

D. Certificates of Deposit and Savings Accounts (CDs/Savings)

The Comptroller may invest in nonnegotiable, interest bearing CDs and savings accounts in state or national banks located in Florida, and having their deposits secured by Chapter 280, Florida Statutes, known as the Florida Security for Public Deposits Act. The issuing bank must not be listed with any nationally known credit watch organization. There is some liquidity risk with CDs because they are subject to penalties for early withdrawal. The Policy further restricts CDs/Savings in any one bank to 5% of the portfolio.

E. Repurchase Agreements (Repos)

A Repo is a financial transaction in which the County exchanges cash for ownership of specific securities with a simultaneous agreement to sell back the securities. Overnight Repos mature in one day. Other Repos are written to mature in specific multi-day periods and are known as term Repos. Other Repos are written as open transactions with indefinite terms subject to liquidation by either party. Yields tend to run close to the federal funds rate. The Policy calls for the specific securities to be only those Treasuries or Instrumentalities allowed by the Policy with maturities less than five years and having a market value of 102% during the term. The County may enter into a Repo transaction only with qualified financial institutions, which have executed a Master Repurchase Agreement with the Comptroller. The Policy further restricts transactions with any one financial institution to 5% of the portfolio, except for overnight Repos.

F. Bankers' Acceptances (BAs)

BAs are generally bearer form securities comprised of underlying letters of credit used to finance international trade. A BA is created from a letter of credit issued by an importer's bank to pay a foreign exporter for goods expected to be received. The exporter will normally present this letter of credit to its bank for a discounted payment. The exporter's bank then presents the letter of credit to a U.S. correspondent bank for payment at which time it is marked *Accepted*. Upon acceptance, the BA becomes an irrevocable and unconditional obligation of the accepting bank, and it is also an obligation of the importer and any endorser thereof. BAs typically have maturities of 180 days or less. Yields are generally greater than Treasuries and Instrumentalities of similar maturity. The Policy requires BAs to be inventory-based, issued by a domestic bank that has an unsecured and unguaranteed obligation rating of at least P-1 and A by Moody's Investors Service and A-1 and A by S&P Global, and ranked in the top 50 domestically chartered insured commercial banks that have consolidated assets of \$300 million or more as reported by the Federal Reserve Board. The Policy further restricts the investment with any one financial institution to 5% of the portfolio.

G. Commercial Paper (CP)

CP is unsecured short-term debt issued primarily by corporations to finance receivables and other short-term needs. CP has a maximum maturity of 270 days. Yields are typically greater than Treasuries and Instrumentalities of similar maturity. The Policy requires the issuer to be rated P-1 by Moody's Investors Service and A-1 by S&P Global and, if backed by a letter of credit, the long-term debt of the credit provider must be rated at least A by two nationally recognized rating agencies. The credit provider must also be ranked in the top 50 domestically chartered insured commercial banks that have consolidated assets of \$300 million or more as reported by the Federal Reserve Board. The Policy further restricts the investment with any one financial institution to 2.5% of the portfolio.

H. Municipal Obligations

For situations necessary to comply with arbitrage regulations, the Comptroller may invest in taxable and tax-exempt debt, and general obligation and revenue bonds issued by state and local governments. Long-term debt must be rated at least Aa by Moody's Investors Service and AA by S&P Global. Short-term debt must be rated at least MIG-2 by Moody's Investors Service and SP-2 by S&P Global. The Policy further restricts the investment with any one issuer to 3% of the portfolio.

I. Fixed Income Money Market Mutual Funds (Money Markets)

Money Markets are pools of securities providing income and liquidity. The Policy enables the Comptroller to invest in SEC qualified fixed income Money Markets with underlying investments in Treasuries and Treasury-backed repurchase agreements. The average maturity of the underlying investments may not exceed sixty days. A maximum of 25% of the portfolio may be invested in Money Markets but when combined with Florida PRIME may not exceed 50% of the portfolio. The Policy further restricts the investment with any one fund to 10% of the portfolio.

VI. LIQUIDITY REQUIREMENTS

The second objective in managing the County's investments is the provision for sufficient liquidity. On a regular basis, the County's receipts and disbursements are analyzed to determine trends in cash inflow and outflow. Cash inflows are invested upon receipt and immediately become part of the portfolio.

The portfolio provides cash for daily payment of operating and capital expenditures, semiannual debt service payments, and biweekly payment of payroll expenditures. Average daily payments for operating and capital expenditures fell 2.7% to \$7.2 million in Fiscal Year 2022 from \$7.4 million in Fiscal Year 2021. The prior year disbursements included the distribution of funds received by the County through The Coronavirus Aid,

Relief, and Economic Security (CARES) Act. Debt service payments are funded through sinking funds held by the County. Total debt service payments increased to \$124.0 million in Fiscal Year 2022 from \$120.4 million in the prior year. Average biweekly payments for payroll expenditures rose 3.6% to \$17.3 million from \$16.7 million, excluding a one-time disbursement, in the prior year. The Fiscal Year 2021 biweekly payroll number excludes retroactive pay following the settlement of contract negotiations between the County and the International Association of Fire Fighters.

VII. DOMESTIC MONETARY POLICY AND NATIONAL ECONOMIC ACTIVITY

In addition to the types of permitted investments and allowable maturities, and liquidity requirements, portfolio performance is influenced by domestic monetary policy and national economic activity. The Policy provides that the Comptroller will utilize federal funds rates, Treasury yield curves, and major U.S. economic barometers in making investment decisions. Yields usually fall or remain stable when monetary policy and economic indicators point to declines in inflationary pressure. Yields usually rise when the economy shows signs of increasing inflation. Domestic monetary policy and economic activity significantly influence the County's portfolio performance.

The Federal Reserve Board (Fed) conducts domestic monetary policy. The Fed controls monetary policy through open market operations, the discount rate and bank reserve requirements. The Fed's Board of Governors administers the discount rate and bank reserve requirements, and the Federal Open Market Committee (FOMC) conducts open market operations. Open market operations have the most significant impact on the County's portfolio performance. The FOMC reviews economic and financial conditions, assesses risks to the economic outlook and attempts to alter the federal funds rate through monetary policy. The federal funds rate is the interest rate at which banks lend to other banks overnight. Changes in federal funds rates trigger events that affect other short-term interest rates and, ultimately, a range of economic variables.

The FOMC increased the target range for federal funds by three percentage points in Fiscal Year 2022. The target range opened the fiscal year at 0.00%-0.25% and ended the year at 3.00%-3.25%. In March, the Fed increased the range for fed funds to 0.25%-0.50%, the first increase in more than three years. The action was taken to address rising inflation due to higher energy prices and supply and demand imbalances related to the pandemic. The Fed also indicated that it would increase rates at each of the next six meetings. Inflation remained near the highest levels in 40 years through the end of the fiscal year. The Fed increased rates by 50 basis points in May followed by three consecutive 75-basis-point increases in June, July and September.

In September, Chairman Powell said, "The FOMC is strongly resolved to bring inflation down to 2%, and will keep at it until the job is done. No one knows whether this process will lead to a recession or, if so, how significant that recession would be."

Yields on Treasury bills and short-term Treasury notes are strongly influenced by the federal funds rate, as well as anticipated changes in this rate. The average Treasury yield

curve shifted upward during Fiscal Year 2022. The largest increases occurred in the 2-year to 5-year range. The average yield on the 3-month Treasury increased by 1.00 percentage point; 6-month, 1.33 percentage points; 1-year, 1.61 percentage points; 2-year, 1.85 percentage points; 5-year, 1.64 percentage points; 10-year, 1.11 percentage points; and 30-year, 66 basis points.

Average annual yields increased across the entire curve in Fiscal Year 2022. The yield curve steepened between 3-months and 5-years but flattened further out on the curve. The spread between the yield on 5-year Treasury and the 3-month Treasury increased to 1.24 percentage points in 2022 from 60 basis points in 2021. However, the spread between the yield on the 30-year Treasury and 3-month Treasury decreased to 1.58% in 2022 from 1.92% in 2021. At the end of the year, the yield curve was inverted with the 2-year Treasury yielding 3.86% and the 10-year Treasury yielding 3.52%. Historically, inverted yield curves have preceded recessions.

In May 2022, the Federal Reserve announced plans to reduce the size of its holdings of Treasury securities, and agency debt and agency mortgaged-backed securities. The Federal Reserve purchased \$4.25 trillion of assets during the pandemic to support the economy. In June, the Federal Reserve began to reduce its holdings of Treasuries by \$30 billion per month, and agency debt and agency mortgaged-backed securities by \$17.5 billion each month. In September, these amounts increased to \$60 billion per month of Treasury securities and \$35 billion per month of agency debt and agency mortgaged-backed securities. The Fed will adjust the asset runoff program as needed to respond to economic and financial developments.

The increase in the County's earnings was driven by a sharp increase in market interest rates. Approximately 72% of the overall portfolio's assets were invested in the current operating sub-portfolio, which has a maximum maturity of 13 months. Maturing investments in the current operating sub-portfolio were reinvested at much higher rates in the second half of the year. The lower returns on the intermediate term sub-portfolio (3-year ladder) and noncurrent operating sub-portfolio (5-year ladder) were primarily attributable to the maturity of higher yielding investments purchased prior to the pandemic and reinvestment of proceeds in lower yielding securities in Fiscal Year 2021 through the first half of Fiscal Year 2022. The returns on book value for the intermediate term and noncurrent sub-portfolios are less sensitive to changes in market interest rates, relative to the current operating sub-portfolio, due to the longer terms to maturity of the investments.

Shown on the next page in Chart 1 are the average 30-year Treasury yield curves for fiscal years 2018 through 2022, followed by Chart 2, which compares the monthly portfolio rates of return with the monthly intended and effective federal funds rates for the same period.

Chart 1 – Average U.S. Treasury Yield Curves

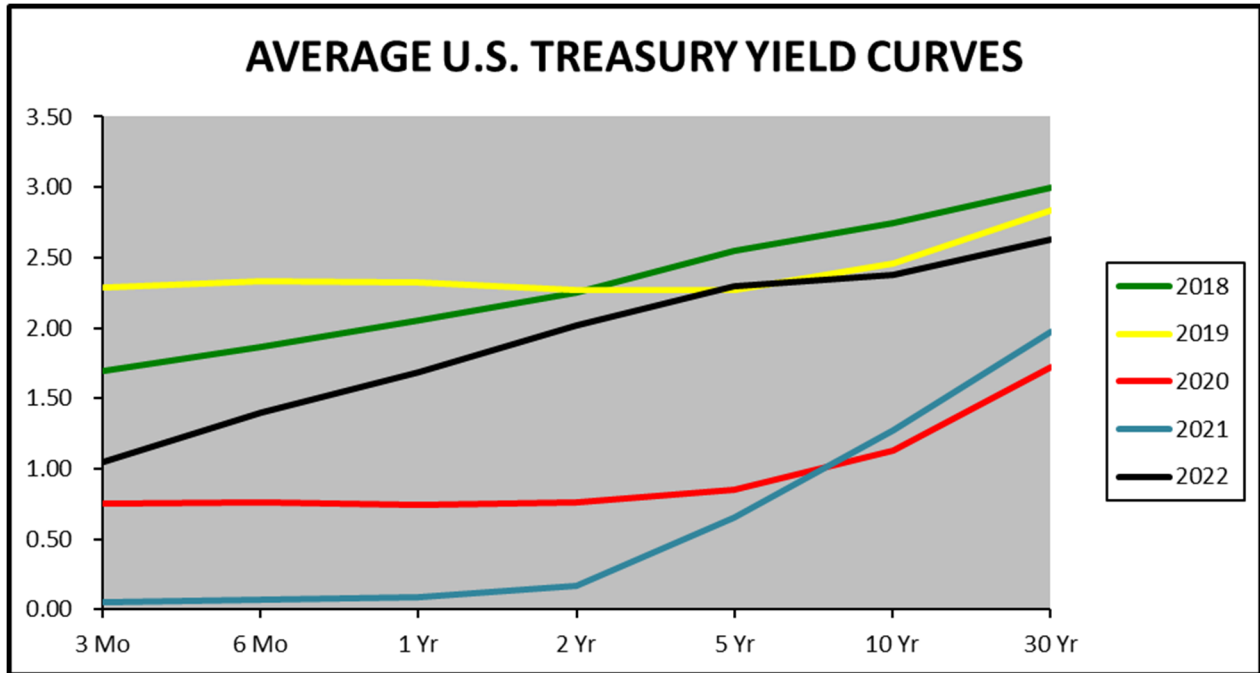
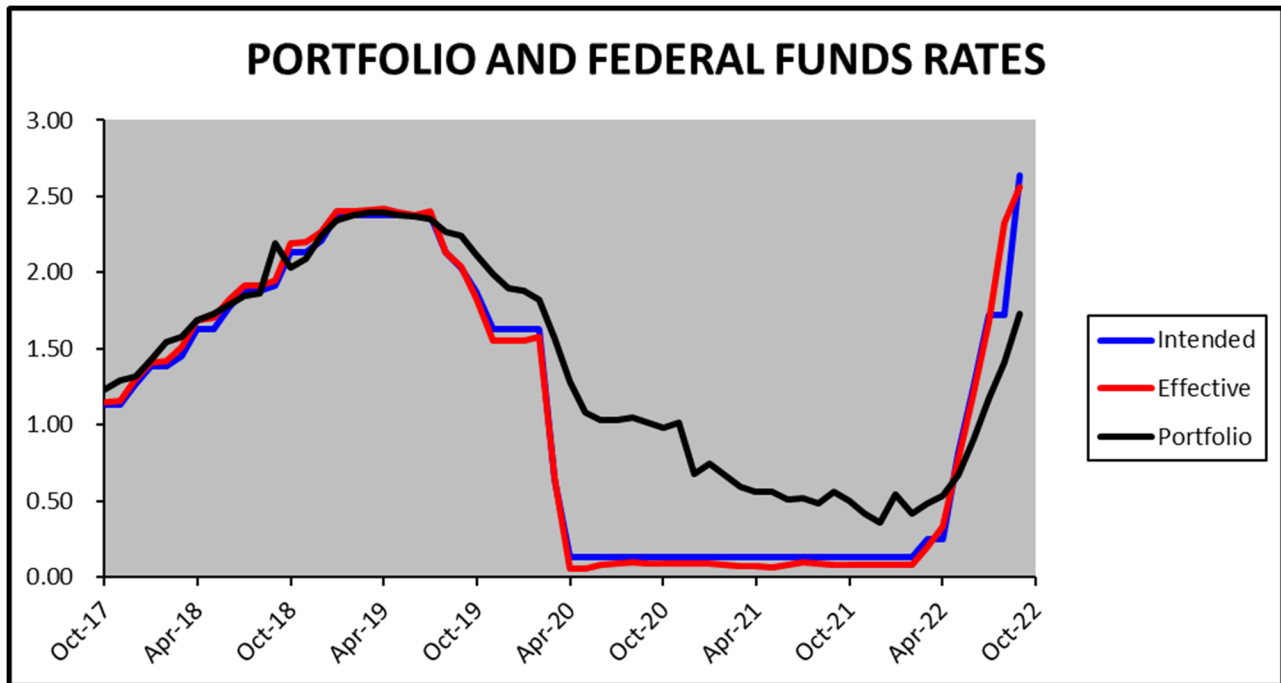


Chart 2 – Portfolio and Federal Funds Rates



Economic barometers are data points that represent trends in the general economy. These barometers significantly influence interest rates on most government and corporate securities nationwide. Shown below in Charts 3 through 13 are the barometers followed by the Comptroller in developing investment strategy during the fiscal year, together with a brief explanation of each.

Chart 3 – Gross Domestic Product

Gross domestic product (GDP) is a measure of the total value of goods and services produced in the United States for a given time period. Quarterly percent changes in the chain price index provide a broad-based estimate of GDP at constant, or inflation adjusted, dollar prices. GDP is the most comprehensive economic scorecard because it is the broadest measure of aggregate economic activity including personal consumption expenditures, investment, net exports and government expenditures. Changes in the GDP chain price index are a widely followed, market-moving indicator. GDP is published by the U.S. Department of Commerce.

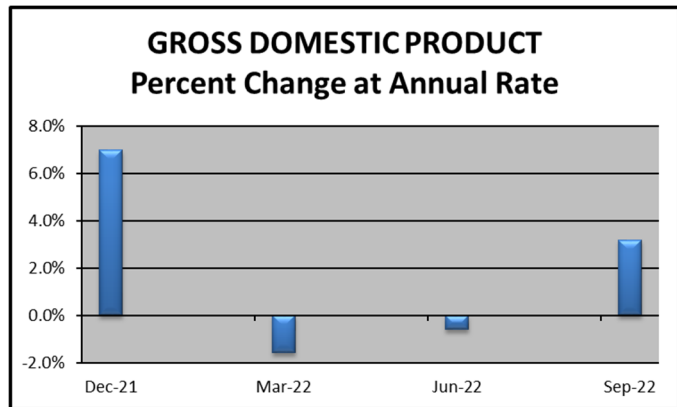


Chart 4 – Nonfarm Payrolls

Nonfarm payrolls (NFP) measure the number of jobs in the nonagricultural economy. Monthly changes reflect the changes in actual numbers of paid employees in business and government establishments. NFP is a coincident indicator of the level of economic activity. Changes are closely watched because they are representative of the state of the economy. NFP is published by the U.S. Department of Labor.

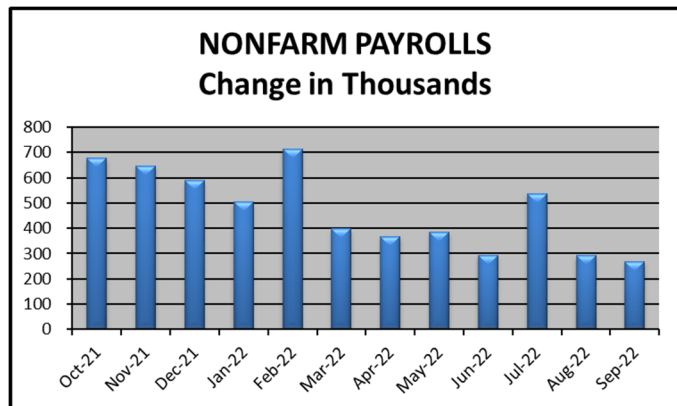


Chart 5 – Unemployment Rate

The unemployment rate is the ratio of the total number of unemployed to the total labor force. The labor force consists of those working and those seeking employment. Monthly changes in this rate and NFP are widely regarded together as the primary monthly economic indicator because the combined data helps forecast other important economic barometers. The unemployment rate is published by the U.S. Department of Labor.

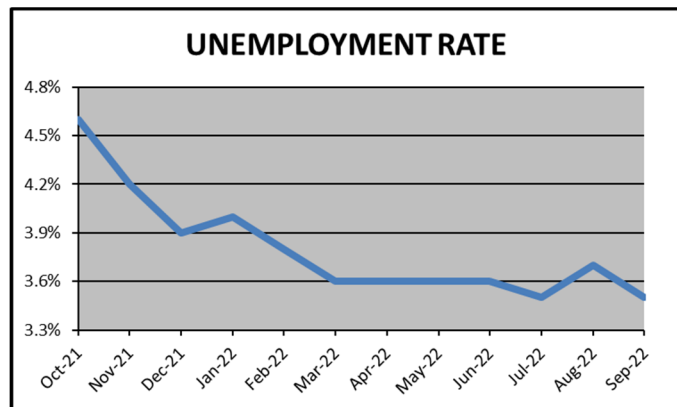


Chart 6 – Personal Consumption Expenditures

Personal consumption expenditures (PCE) is a measure of goods and services purchased by persons in the United States. PCE is the most important and typically the most stable of the four components that comprise GDP. PCE normally represents more than two-thirds of GDP. The three sectors of PCE are durable goods (expected to last three years or more), nondurable goods (less than three years) and services. Services account for approximately 62% of PCE. The U.S. Department of Commerce publishes PCE.

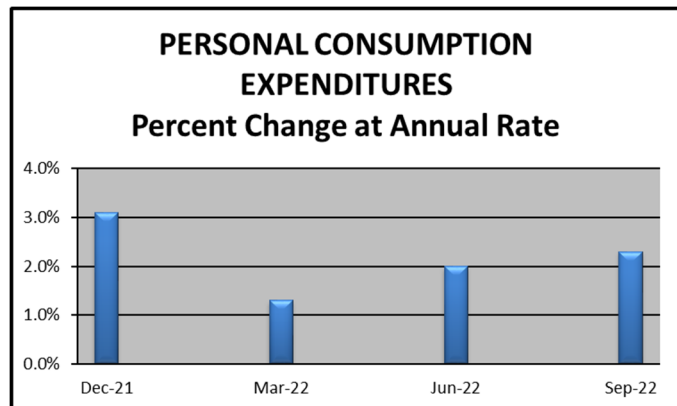


Chart 7 – Retail Sales (Excluding Autos)

Retail sales is a measure of consumer spending for a given month. This reading is used to help forecast PCE and GDP. The control component, retail sales excluding autos, is used to measure the growth rate in the non-service component of PCE. This indicator is hard to forecast and the market is often sensitive to large, unexpected readings. The U.S. Census Bureau of the Department of Commerce publishes retail sales.

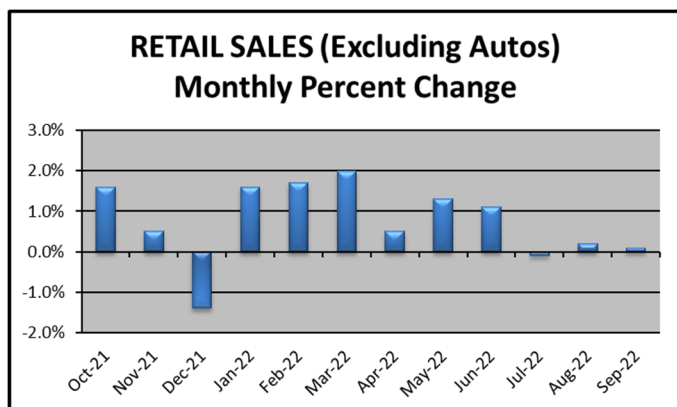


Chart 8 – Consumer Sentiment

Consumer sentiment is a measure of how consumers view prospects for their own financial condition, how they view prospects for the general economy in the near term, and their view of the economy over the long term. Monthly levels of consumer sentiment are included in the Conference Board's Index of Leading Economic Indicators and are associated with consumer spending. The University of Michigan and Thomson Reuters publish the report on consumer sentiment.

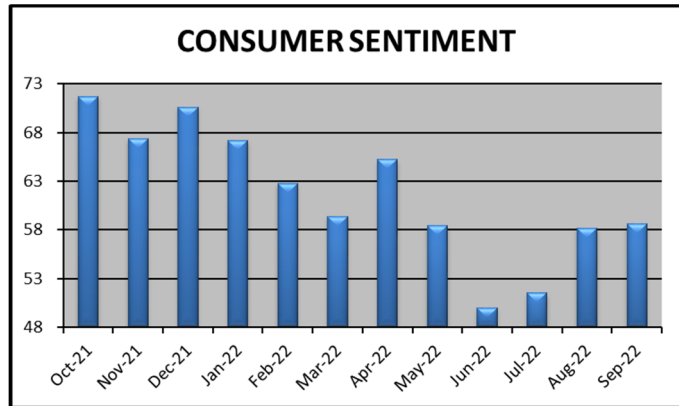


Chart 9 – Consumer Price Index

The consumer price index (CPI) is a measure of the average price of a fixed basket of goods and services that consumers in the U.S. buy on a regular basis. Monthly percent changes in the index reflect the average change in consumer prices. The CPI is widely followed and regarded by many as the measure of inflation. CPI is published by the U.S. Department of Labor.

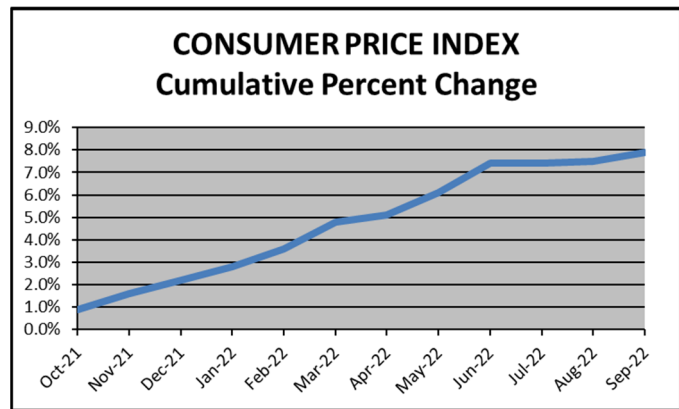


Chart 10 – Core Consumer Price Index

Core CPI excludes food and energy costs from the CPI. The core CPI rate is believed by many to be a better approximation of underlying inflation than the CPI because it removes items that are subject to large, temporary price changes. Economists and market analysts monitor core CPI for its greater monthly stability. Core CPI is published by the U.S. Department of Labor.

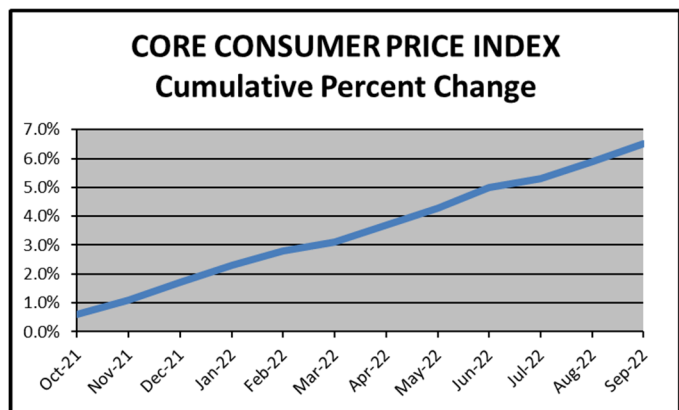


Chart 11 – Producer Price Index

The producer price index (PPI) is a measure of the average level of prices of a fixed basket of goods and services received by domestic producers. Monthly percent changes reflect the rate of change in such prices. Changes in the PPI are widely followed as a significant indicator of inflation trends. PPI is published by the U.S. Department of Labor.

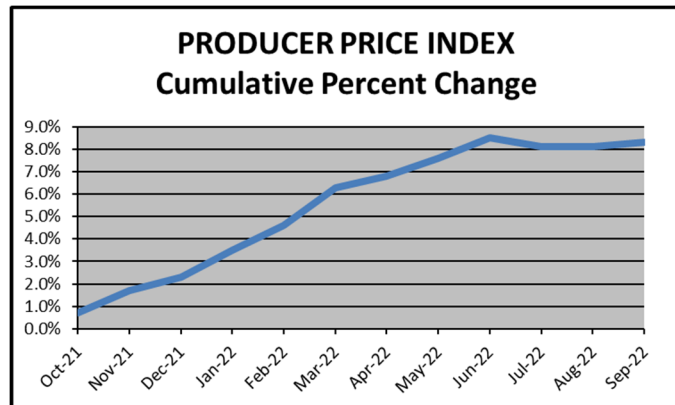


Chart 12 – Housing Starts

Housing starts is a measure of the number of residential units on which construction has begun each month. The level of housing starts is widely followed as a significant indicator of residential construction trends and demand for furniture, home furnishings and appliances. Housing starts is published by the U.S. Department of Commerce.

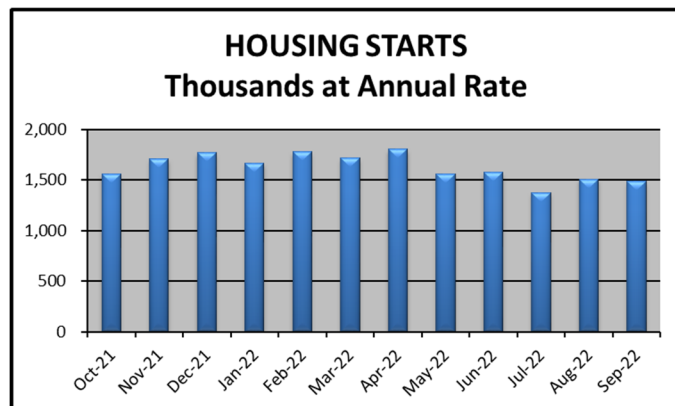
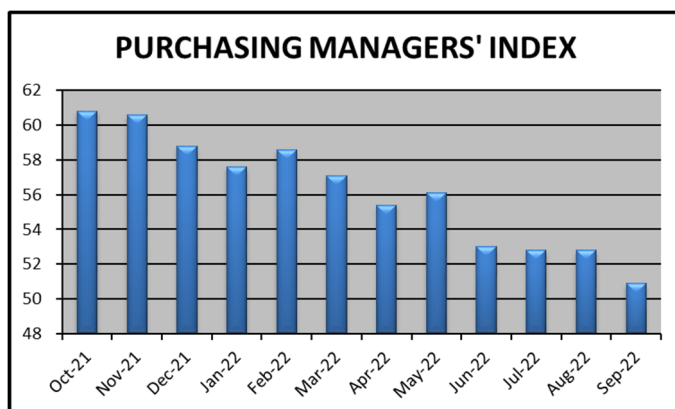


Chart 13 – Purchasing Managers' Index

The purchasing managers' index (PMI) is derived from surveys of purchasing managers about the general direction of production, orders, inventories, employment, vendor deliveries and prices. PMI is an indicator of overall factory sector trends. Historically, readings above 50 are associated with expanding manufacturing activity; readings over 42.7 indicate that the overall economy is expanding.



Readings below 50 are typically associated with contractions in manufacturing and readings below 42.7 indicate that the overall economy is contracting. PMI is widely followed because it gauges momentum in manufacturing and corporate earnings. The Institute for Supply Management publishes PMI.

Leading into Fiscal Year 2022, economists believed the recovery from the pandemic would continue to be uneven. According to a survey conducted by Bloomberg, GDP was forecast to average 4.2% in Fiscal Year 2022. The economy was expected to be driven by strong consumer spending, supported by high levels of accumulated household savings. However, inflation was rising on robust demand and supply shortages. Fed Chairman Jerome Powell expected inflationary conditions to persist well into 2022. In November 2021, the Fed announced plans to scale back pandemic aid by tapering its monthly bond purchases. The Fed stressed that they were not on a preset course and would make adjustments as needed.

Indicated in Charts 3 through 13, the barometers reflect varying economic conditions throughout the fiscal year. According to GDP, the economy was growing at an annual rate of 7.0% in the quarter ended December 31, 2021. The economy continued to strengthen as the coronavirus lockdowns and quarantines were eased. Gains were driven by consumer spending, inventory restocking and business investment. PCE climbed to a 3.1% pace of growth, up from 2.0% in the prior quarter. Job growth accelerated during the quarter and unemployment continued to fall. Nonfarm payrolls added an average of 637 million jobs per month during the quarter and the unemployment rate fell to 3.9%, the lowest level since the beginning of the pandemic.

GDP fell 1.6% in the quarter ended March 31, 2022, due primarily to a sharp increase in imports and decrease in exports. The negative reading was more indicative of the volatility of GDP than economic weakness. The surge in imports showed consumer demand was strong and there was a positive outlook for economic growth. The labor market continued to recover at a rapid pace and the unemployment rate dropped to near pre-pandemic lows of 3.6% in March. CPI increased 1.2% in March, the most since 1981, and 8.5% from a year earlier. The increase was led by gas prices, while food and shelter costs were also large contributors. Energy prices soared following the Russian invasion of Ukraine in February 2022. In March, the Fed raised the target range for fed funds by 25 basis points to 0.25%-0.50%. The Fed raised rates due to persistently high inflation, which was running well above the Fed's preferred 2% annual target.

In the third quarter of the fiscal year, GDP fell for the second consecutive month and inflation and interest rates increased. For the quarter ended June 30, 2022, GDP fell 0.6% on decreases in inventories, housing investments and government spending. The deceleration of the decline in GDP was primarily attributable to increases in consumer spending and exports. PCE increased 2% despite decades-high inflation. CPI rose 1.3% in June, the largest increase since 2005, and the twelve-month increase was 9.1%. To combat the rising inflation pressures, the Federal Reserve increased the fed funds rate by 50 basis points in May and 75 basis points in June, the largest increase since 1994. These actions increased the range for fed funds to 1.50%-1.75%. The pace of housing starts fell to 1.58 million in June after reaching an annual high of 1.81 million in April. Higher mortgage rates and inflation curbed demand in the housing market.

GDP increased at a 3.2% annual rate in the quarter ended September 30, 2022. Growth was driven by increases in exports, consumer spending, business investment in

equipment and intellectual property, and government spending. The gains were partially offset by decreases in housing and inventories. Housing starts fell to 1.49 million in September as demand waned on the highest mortgage rates in 20 years. CPI increased 0.4% in September and 8.2% for the fiscal year, and unemployment matched a 50-year low of 3.5%. The high rate of inflation and low unemployment led to additional monetary policy tightening by the Fed. The Fed increased rates by 75 basis points at its July and September meetings, respectively, bringing the range for fed funds up to 3.00%-3.25%.

Going into Fiscal Year 2023, economists expected tepid economic growth and believed there was a good chance the economy would slip into a recession. According to a survey conducted by Bloomberg, GDP was forecast to average 0.1% in Fiscal Year 2023. Inflation pressures persisted as a result of supply chain issues related to the pandemic, higher food and energy prices, and the war in Ukraine. The FOMC announced that it was strongly committed to reducing the rate of inflation. The Federal Reserve was expected to continue increasing the target range for the federal funds rate and reducing the size of its balance sheet.

VIII. LOCAL ECONOMIC ACTIVITY

In addition to the types of permitted investments and allowable maturities, liquidity requirements, and domestic monetary policy and national economic activity, the portfolio’s effective rate of return is influenced by the local economy. The County derived approximately 79% of its Fiscal Year 2022 revenues from 12 revenue sources including several taxes, user fees and charges, state-shared revenues and investment income. Shown in Table 2 are the County’s 12 major revenues received in Fiscal Years 2022 and 2021.

Table 2 – Orange County’s 12 Major Revenue Sources

<u>Revenue</u>	<u>FY 2022*</u>	<u>FY 2021</u>
Ad Valorem Tax	\$1,034,868,721	\$992,267,637
Water Utilities System Operations	231,633,514	216,559,478
Half-Cent Sales Tax	236,196,255	177,710,044
Tourist Development Tax	336,319,237	176,872,123
Public Service Tax	117,935,952	104,469,225
Impact Fees (excl. School Impact Fees)	81,333,027	70,379,145
Mandatory Refuse Fees	55,296,907	53,680,831
State Revenue Sharing	59,822,161	50,635,273
Fuel Taxes	46,457,017	45,408,128
Solid Waste Tipping Fees	41,636,781	38,977,122
Convention Center Operations	66,316,885	18,088,357
Interest Earnings	22,498,129	15,768,814
Totals	\$2,330,314,586	\$1,960,816,177

*Preliminary – subject to change.

IX. INVESTMENT OPERATIONS

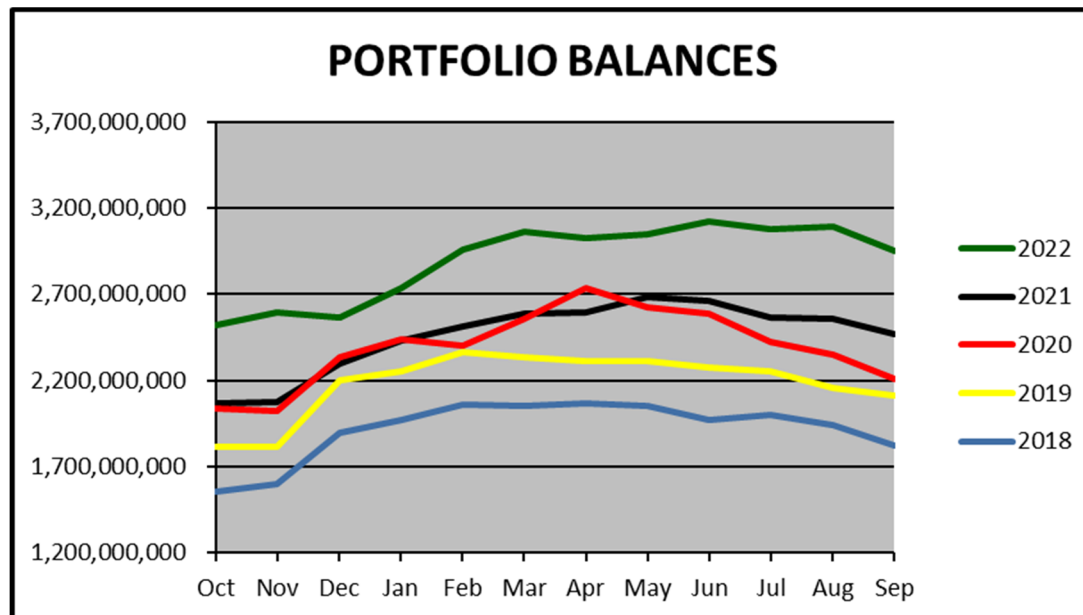
Qualified professionals in the Comptroller's Office conduct investing activities in accordance with Florida Statutes, County Ordinances, and written policies and procedures. Monthly reports of investment activity and positions are prepared and distributed to Comptroller management, management of the BCC and the Investment Advisory Committee. Regular meetings of the Committee are held to monitor the portfolio, evaluate investment performance and discuss investment strategies.

The Comptroller uses sophisticated techniques in carrying out its investment activities including the use of electronic bank and trust account systems; electronic funds transfer; on-line, real-time monitoring of U.S. securities markets; and electronic trading. Bank account balances, cash requirements, investment positions and trust account activity are determined daily. Current conditions and evaluations of domestic monetary policy and national economic activity are considered in purchasing investments.

A. Portfolio Balances

The portfolio's opening balance in Fiscal Year 2022 was \$2.47 billion and the average daily balance was \$2.87 billion. The portfolio's ending balance for Fiscal Year 2022 was \$2.95 billion. The higher portfolio balances reflect increases in tourist development tax and ad valorem revenues, as well as aid received from the federal government to address the pandemic. In June 2022, Orange County received \$135.3 million from the America Rescue Plan Act. Shown in Chart 14 are the portfolio balances as of the end of each month in fiscal years 2018 through 2022.

Chart 14 – Portfolio Balances



B. Portfolio Composition

As of September 30, 2022, the portfolio was fully invested in permitted investments within allowable composition limits. As shown in Chart 15 below, the portfolio contained Treasuries, Florida PRIME (SBA), Instrumentalities, and Money Markets comprised of Treasuries and Treasury-backed repurchase agreements. Chart 16, September 30, 2021 Portfolio Composition by Investment Type, is presented for comparative purposes.

Chart 15 – September 30, 2022 Portfolio Composition by Investment Type

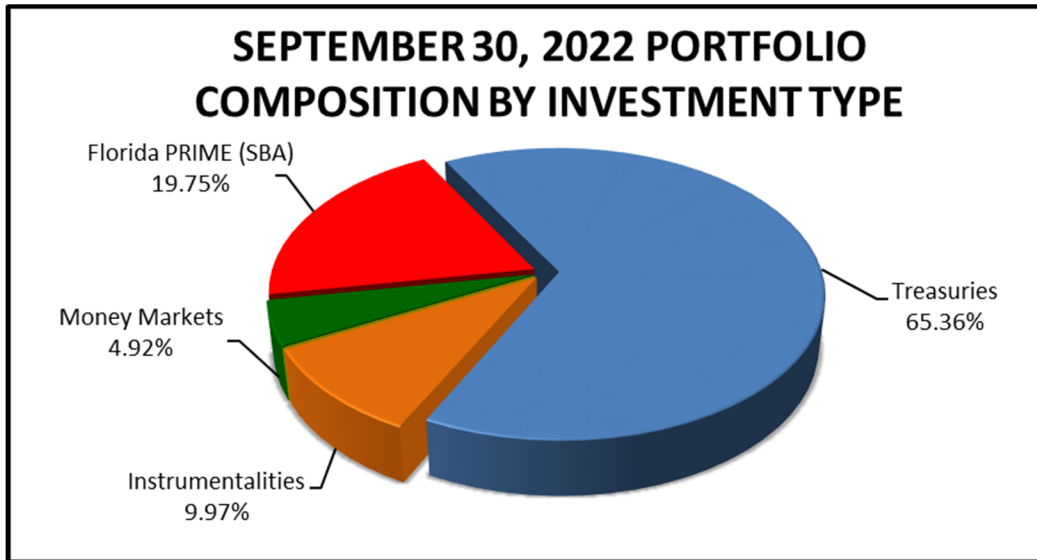
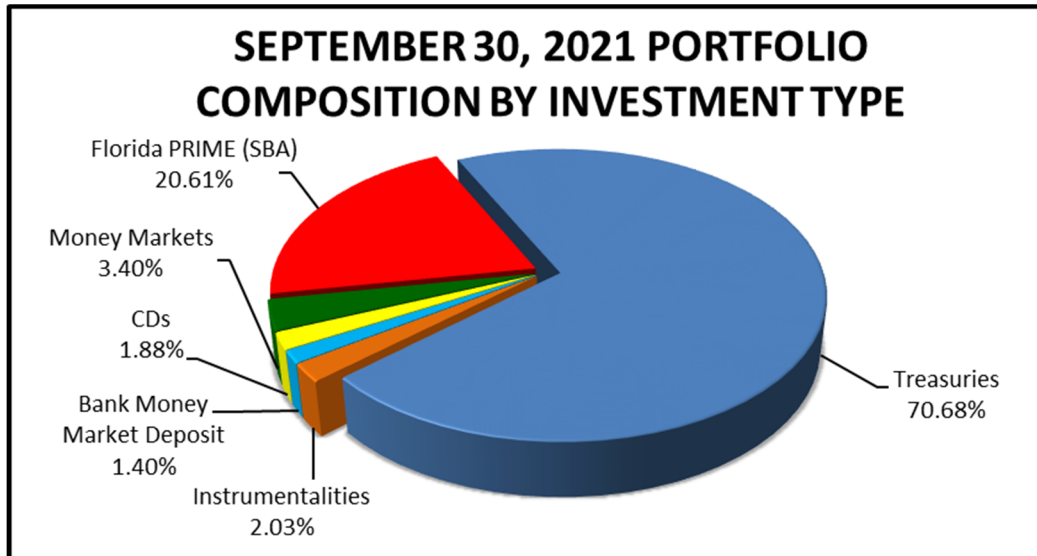


Chart 16 – September 30, 2021 Portfolio Composition by Investment Type



The portfolio was managed in compliance with the Policy, which requires the portfolio to be diversified by investment type. However, Treasuries may represent 100% of the portfolio because they are backed by the full faith and credit of the United States Government. During Fiscal Year 2022, the average allocations to Treasuries and money market mutual funds were increased. Allocations to instrumentalities, CDs and bank money market deposit accounts were reduced. Changes in the average portfolio composition can be seen in Charts 17 and 18.

Chart 17 – FY 2022 Average Portfolio Composition by Investment Type

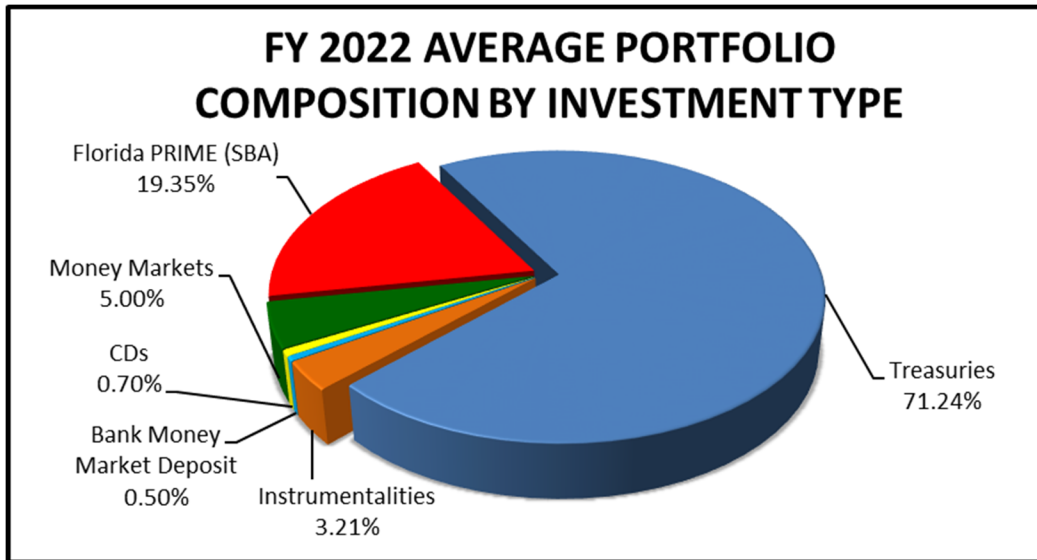
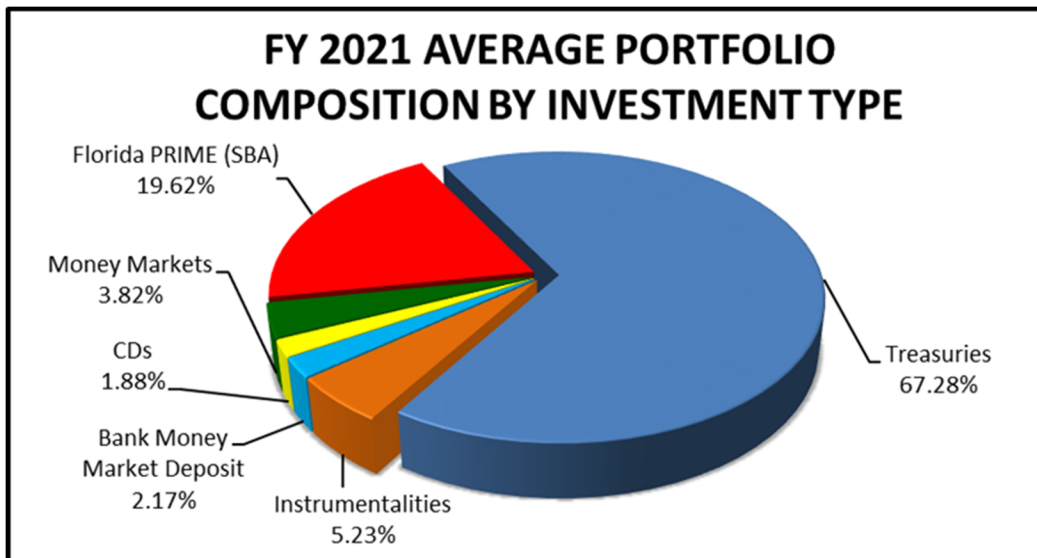


Chart 18 – FY 2021 Average Portfolio Composition by Investment Type



The portfolio is comprised of four sub-portfolios: current operating, intermediate term, noncurrent operating and debt service reserve. The current operating sub-portfolio has a maximum maturity of 13 months and is managed to meet

operating, payroll and debt service requirements. The intermediate term sub-portfolio has a maximum maturity of 36 months and was established to increase returns on excess liquidity and diversify investment maturities across the yield curve. The noncurrent sub-portfolio is comprised of a 5-year ladder designed to meet longer term funding requirements. Investments in the debt service reserve sub-portfolio are governed by the County’s bond covenants. The Policy requires debt service reserve and project construction investments to have terms that coincide with the expected use of the funds and in accordance with debt covenants, but not to exceed 10 years. The September 30, 2022 Portfolio Composition by Sub-portfolio is presented below. Chart 20, September 30, 2021 Portfolio Composition by Sub-portfolio, is presented for comparative purposes.

Chart 19 – September 30, 2022 Portfolio Composition by Sub-portfolio

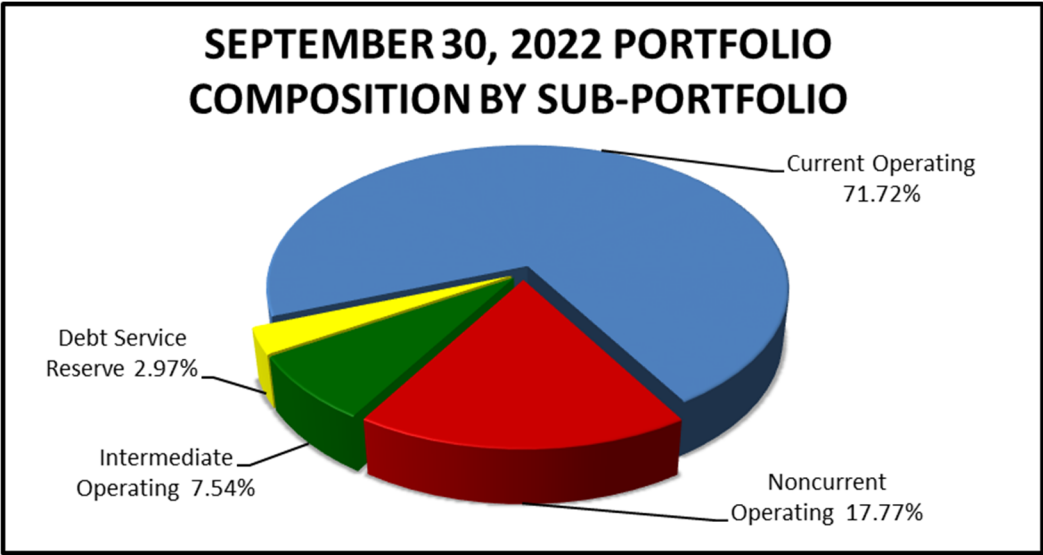
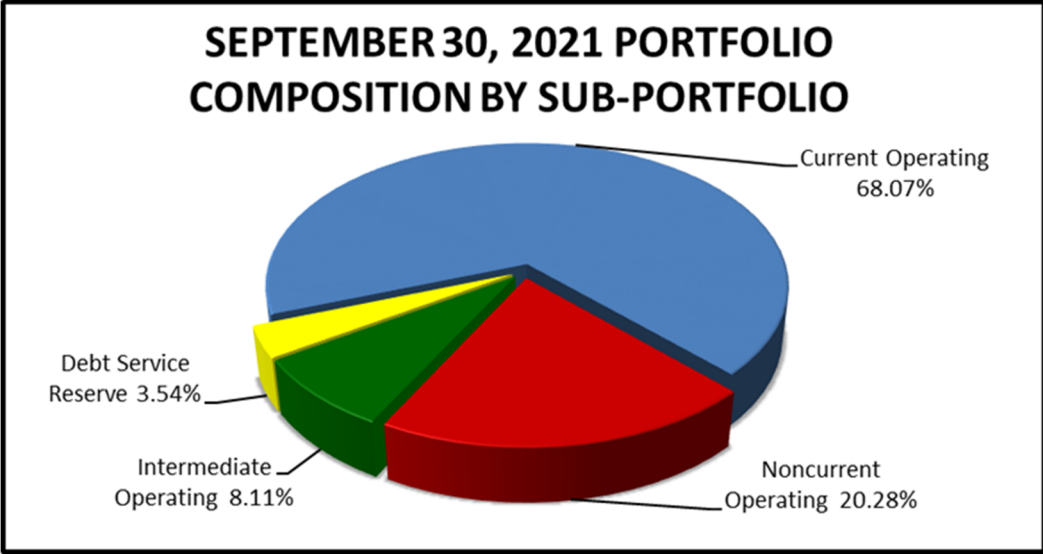


Chart 20 – September 30, 2021 Portfolio Composition by Sub-portfolio



In Fiscal Year 2022, current operating funds represented a larger percentage of the average portfolio composition. The increase in the average balance of the overall portfolio from the prior year was almost entirely invested in the current operating sub-portfolio, increasing its allocation on a percentage basis. The change in average composition by sub-portfolio is presented below in Charts 21 and 22.

Chart 21 – FY 2022 Average Portfolio Composition by Sub-portfolio

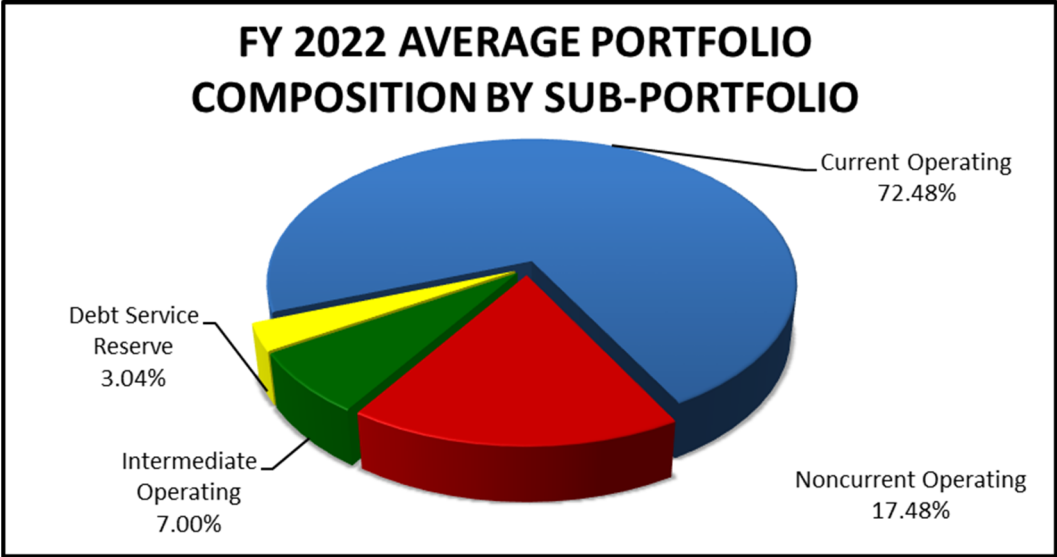
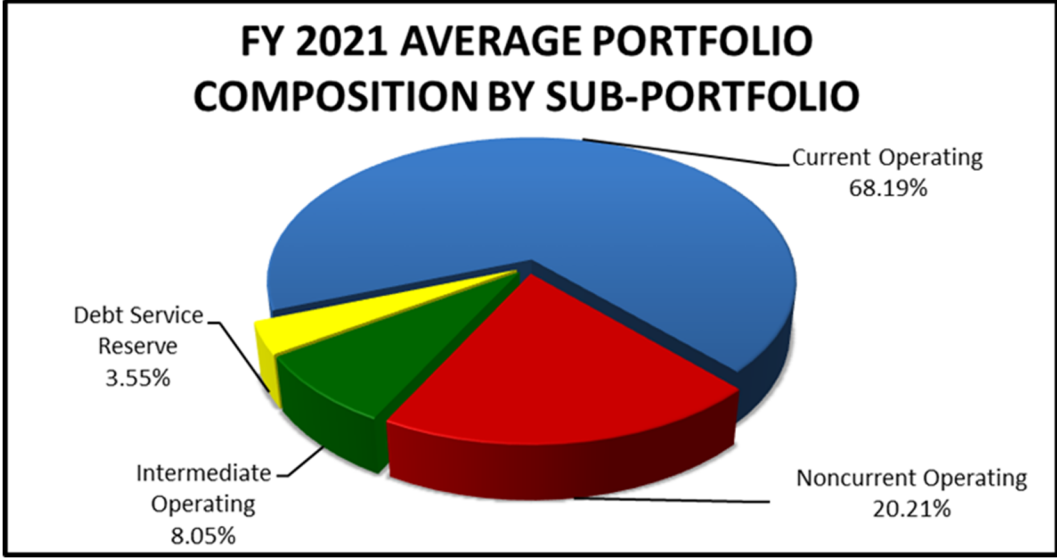


Chart 22 – FY 2021 Average Portfolio Composition by Sub-portfolio



C. Portfolio Maturities

The Policy requires sufficient liquidity and diversity in maturities. Shown in Table 3 are the average terms of each investment type at September 30, 2022 and 2021. Average term is the weighted average number of days from purchase to maturity of the investment. Average terms extend past 13 months in some cases due to the long-term investment of noncurrent operating funds, intermediate term funds and project construction funds.

<u>Investment Type</u>	<u>FY 2022</u>	<u>FY 2021</u>
Florida PRIME (SBA)	1	1
Money Market Funds	1	1
Instrumentalities	292	355
Treasuries	811	863
Bank Money Market Deposit	NA	1
Certificates of Deposit	NA	365

Available balances were invested for an average term of 559 days in Fiscal Year 2022 compared with an average term of 599 days in Fiscal Year 2021. Table 4 below reports the average term of the portfolio for each month in Fiscal Years 2022 and 2021. Terms were reduced as investment maturities were shortened in the rising interest rate environment.

The portfolio’s average days to maturity was 338 days in Fiscal Year 2022 compared with 347 days in 2021. Average days to maturity is the average number of days remaining to maturity for the portfolio. Table 5 below reports the average days to maturity for each month in Fiscal Years 2022 and 2021.

Table 4 – Average Term (Days)

<u>Period</u>	<u>FY 2022</u>	<u>FY 2021</u>
October	620	659
November	603	654
December	616	611
January	585	591
February	546	569
March	533	561
April	540	568
May	530	570
June	521	578
July	521	602
August	529	602
September	559	624
Average	559	599

Table 5 – Average Days to Maturity

<u>Period</u>	<u>FY 2022</u>	<u>FY 2021</u>
October	398	326
November	384	338
December	389	335
January	373	319
February	345	313
March	334	326
April	325	341
May	307	356
June	304	365
July	289	378
August	291	377
September	312	395
Average	338	347

D. Interest Earnings and Yields

The dollar amount of interest earnings is used in historical and budgetary comparisons, and in cash flow analysis. The portfolio earned \$22,498,129 on an average daily balance of \$2,867,418,360 in Fiscal Year 2022. For comparison, the portfolio earned \$15,768,792 on an average daily balance of \$2,454,641,688 in Fiscal Year 2021. Actual interest income was \$10,770,552 more than the budgeted amount in Fiscal Year 2022. For comparison, actual interest income was \$1,972,960 more than the budgeted amount in Fiscal Year 2021. Budgeted and actual interest earnings for both fiscal years are shown in Table 6 below.

Table 6 – Budget and Actual Interest Earnings

	<u>FY 2022</u>	<u>FY 2021</u>
Actual	\$22,498,129	\$15,768,792
Budget	<u>11,727,577</u>	<u>13,795,832</u>
Variance	\$10,770,552	\$1,972,960

The Fiscal Year 2022 interest earnings and effective rate of return on each sub-portfolio are shown below in Table 7. The Fiscal Year 2021 interest earnings and effective rate of return by sub-portfolio are provided in Table 8 for comparison.

Table 7 – FY 2022 Interest Earnings and Effective Rate of Return by Sub-portfolio

FY 2022		
<u>Sub-portfolio</u>	<u>Interest Earnings</u>	<u>Effective Rate of Return</u>
Current Operating	\$13,771,092	0.66%
Noncurrent Operating	7,085,644	1.41%
Intermediate Term	1,149,221	0.57%
Debt Service Reserve	<u>492,172</u>	<u>0.56%</u>
Total	\$22,498,129	0.78%

Table 8 – FY 2021 Interest Earnings and Effective Rate of Return by Sub-portfolio

FY 2021		
<u>Sub-portfolio</u>	<u>Interest Earnings</u>	<u>Effective Rate of Return</u>
Current Operating	\$2,875,176	0.17%
Noncurrent Operating	8,623,873	1.74%
Intermediate Term	4,119,246	2.08%
Debt Service Reserve	<u>150,497</u>	<u>0.17%</u>
Total	\$15,768,792	0.64%

The effective rate of return on the current operating sub-portfolio, which has a maximum maturity of 13 months, increased 49 basis points to 0.66%. The higher rate of return was attributable to the Federal Reserve's series of interest rate hikes beginning in March 2022. The fed funds target range started the year at 0.00%-0.25%. The Fed raised rates at each of its five meetings between March and September. The target range for fed funds ended Fiscal Year 2022 at 3.00%-3.25%. Short-term interest rates reached levels not seen since 2008.

The rate of return on the intermediate term sub-portfolio (3-year ladder) fell by 1.51 percentage points to 2.08% and the noncurrent operating sub-portfolio decreased by 33 basis points to 1.41%. Higher yielding securities purchased prior to the pandemic matured and were reinvested at lower market rates during the first half of the year. In addition, capital gains were sharply lower as there were fewer opportunities to execute roll down the yield curve trades.

Investments staff is authorized to sell securities that fall within 13 months of maturity if a capital gain can be realized. The proceeds are immediately reinvested in a Treasury note at the end of the noncurrent operating sub-portfolio's 5-year ladder or the intermediate term sub-portfolio's 3-year ladder. Roll down the yield curve sales generated \$1.0 million in capital gains in Fiscal Year 2022 compared with \$2.8 million in Fiscal Year 2021.

The yield on the debt service reserve sub-portfolio increased by 39 basis points to 0.56%. The higher rate of return on this sub-portfolio was primarily due to the sharp increase in short-term rates in the second half of the year. Investments in this sub-portfolio were made to match maturities to debt service due dates. All investments in this sub-portfolio had maturities of 12 months or less.

The dollar amount of earnings by itself has little meaning as a measurement of portfolio performance. A better gauge of portfolio performance is the effective rate of return, which is measured in percent and can be compared to rates in prior years and to comparable investments. For Fiscal Year 2022, the portfolio's effective rate of return was 0.78%. In Fiscal Year 2021, the portfolio's effective rate of return was 0.64%. Shown below in Table 9 are the effective rates of return for the permitted investment types during Fiscal Years 2022 and 2021.

Table 9 – Average Portfolio Effective Rate of Return by Investment Type

<u>Investment Type</u>	<u>FY 2022</u>	<u>FY 2021</u>
Instrumentalities	1.59%	0.18%
Florida PRIME (SBA)	0.91%	0.15%
Money Markets	0.89%	0.01%
Treasuries	0.72%	0.87%
Certificates of Deposit	0.20%	0.44%
Bank Money Market Deposit	0.15%	0.33%

The increase in returns was driven by substantially higher market interest rates. The FOMC raised the fed funds rate at each of its five meetings between March and September, increasing the target range from 0.00%-0.25% to 3.00%-3.25%. Yields on instrumentalities surged to 1.59% as new investments were added after yield spreads widened from Treasuries. Returns on the SBA and the money markets soared to 0.91% and 0.89%, respectively. Certificates of deposit and bank money market deposits were fully withdrawn during the year due to low deposit rates. The average return on Treasuries fell due to the reinvestment of maturing investments at lower yields in the first half of the year and lower capital gains. Additionally, Treasuries represent 100% of the noncurrent operating and intermediate term sub-portfolios, giving them the longest weighted average maturity of any investment type. When interest rates change, it takes longer for Treasuries to mature and proceeds to be reinvested at market rates.

E. Benchmark Comparisons

Portfolio performance is best measured when compared with rates of return on comparable investments. The Comptroller has established benchmarks as a means to monitor portfolio performance. A benchmark is a passive portfolio rate of return that represents expected returns with given levels of risk. In establishing benchmarks for the portfolio, the Comptroller evaluated investments with maturities and credit, market and liquidity risks comparable to the permitted investments. The Comptroller continued using certain Treasuries, the ICE BofAML 0-1 Year Treasury Index and the effective federal funds rate as benchmarks for Fiscal Year 2022. The Comptroller also continued to use an internally calculated benchmark named the Committee Benchmark. This customized benchmark is computed using the yields on the effective federal funds rate, the 6-month constant maturity Treasury, the 2-year constant maturity Treasury and the 3-year constant maturity Treasury. Treasuries are defined in Section V above, and the effective federal funds rate is described in Section VII above. The ICE BofAML Index is the average yield of approximately 20 Treasuries with maturities of one year or less.

The County's portfolio was outperformed by all the benchmarks. Interest rates rose sharply beginning in March 2022. It takes time for the returns on the portfolio to reflect changes in market interest rates. The returns on the SBA, money market mutual funds and short-term investments in the current operating sub-portfolio adjusted more quickly because of the smaller weighted average maturities of these assets relative to the long-term sub-portfolios. The increase in the portfolio's rate of return was restrained by long-term, lower yielding Treasury investments made in the noncurrent operating and intermediate term sub-portfolios during the pandemic. In Fiscal Year 2023, new investments across all asset classes should generate higher returns because the entire yield curve has significantly shifted upward.

Table 10 – Benchmark Comparisons

<u>Benchmark</u>	<u>FY 2022</u>	<u>Variance</u>	<u>FY 2021</u>	<u>Variance</u>
Portfolio	0.78%		0.64%	
3-Month Treasury	1.05%	-0.27%	0.05%	0.59%
6-Month Treasury	1.40%	-0.62%	0.07%	0.57%
ICE BofAML 0-1 Year Treasury	1.17%	-0.39%	0.10%	0.54%
1-Year Treasury	1.69%	-0.91%	0.08%	0.56%
2-Year Treasury	2.02%	-1.24%	0.17%	0.47%
Effective Fed Funds	0.79%	-0.01%	0.08%	0.56%
Committee Benchmark	1.40%	-0.62%	0.11%	0.53%

F. Brokers, Dealers and Direct Issuers

Management of the portfolio was also accomplished in compliance with the Policy, which requires the portfolio to be diversified by financial institution. The Policy indicates that the Comptroller shall purchase securities only from financial institutions which are qualified as public depositories by the Chief Financial Officer of the State of Florida, from primary securities dealers as designated by the Federal Reserve Bank of New York, from securities dealers certified by the County’s Business Development Division as Minority/Women Business Enterprises and having offices in Florida, or from direct issuers of CP and BAs. The Policy also requires a minimum of three competitive offers.

The Comptroller records the number and amount of purchases and sales by financial institutions and dealers. Shown below in Table 11 are the primary dealers and qualified public depositories (QPD) ranked by Fiscal Year 2022 percentage of total County transactions and compared with percentage of transactions in Fiscal Year 2021.

Table 11 – QPD, Dealers and Direct Issuers

<u>Broker/Dealer</u>	<u>Status</u>	<u>FY2022</u> <u>% of Total</u>	<u>FY2021</u> <u>% of Total</u>
Bank of Montreal (BMO)	Primary	23.25%	21.42%
Citigroup	Primary	22.35%	24.31%
Jefferies & Company, Inc.	Primary	19.86%	13.26%
RBC Capital Markets	Primary	17.62%	31.69%
Wells Fargo	Primary	16.92%	7.10%
City National Bank	QPD	—	1.44%
Centennial Bank	QPD	—	0.73%
First Colony Bank of Florida	QPD	—	0.05%

X. DEPOSITORY BANKING

General banking and cash management services are provided by an Agreement for Banking Services with Wells Fargo Bank, N.A., for the period July 1, 2019 through June 30, 2022. Wells Fargo was selected as the County's banking institution in a competitive procurement process. The Agreement provides for three one-year extensions upon mutual consent of the parties. If the three one-year options are exercised, the agreement would run through June 30, 2025. Wells Fargo is a member of the Federal Reserve System and the National Automated Clearing House Association. Wells Fargo is also a QPD as defined by the Florida Security for Public Deposits Act.

Services provided by Wells Fargo under the Agreement include general banking, non-interest bearing and interest bearing transaction accounts, retail and wholesale lockbox, and electronic funds transfers. Discussed below is a brief description of each service.

A. General Banking

General banking services include deposits, check writing, credit card processing, stop payments, return item processing, money changing, account analysis, bank statements, full check reconciliation, electronic information reporting and positive payment. Positive payment is an electronic process involving the County's checking accounts that reduces the risk of check fraud and allows unauthorized checks to be automatically returned to the payee.

B. Bank Accounts

The County has the option to establish interest bearing or non-interest bearing accounts. The County maintains 25 accounts including collection and deposit, and disbursement accounts. Nine of the accounts are checking accounts. Available balances are compensated at the rate of the upper bound of the targeted federal funds range less 25 basis points. Earnings in excess of those needed to offset service fees are paid to the County, except in the Transfer of Lien account. Earnings on this account are used only to offset bank service fees.

All bank balances are covered by the Federal Deposit Insurance Corporation (FDIC) up to a total of \$250,000 and collateralized by the Florida Security for Public Deposits Act.

C. Lockbox

Wells Fargo provides wholesale lockbox services to the Fire Rescue Department and the Solid Waste System. Wells Fargo also provides whole-tail lockbox

services to the Water Utility System and the County's Red Light Running Program. A wholetail lockbox is a hybrid of a retail lockbox and a wholesale lockbox. A lockbox is a method of collecting regular, recurring payments from customers of the County. The County's lockboxes provide faster deposit of payments, reduce handling and processing time, and strengthen internal controls by separating the cash handling responsibilities from invoicing and billing responsibilities.

D. Electronic Funds Transfers (EFT)

EFT are electronic communications of financial transactions between banks and bank customers. Wells Fargo provides the County with the capability to receive and disburse funds through the Federal Reserve Wire System, immediately and overnight. Automated clearinghouse transfers (ACH) include the ability to directly draw from customer (Water Utilities) and taxpayer (Tourist Development and Public Service Tax) accounts for immediate credit to the County's accounts. ACH transfers also provide for direct deposit of employee payroll earnings for immediate credit to their accounts, and for the County's payment of various state and federal tax liabilities. The Comptroller utilizes comprehensive ACH debit blocking to prevent unauthorized disbursements.